

**STATE OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES**

**Prepared Testimony of Douglas Montague  
on behalf of the California Department of Water Resources<sup>1</sup>  
in Application 00-11-038 *et al.*—  
Bond Charge Phase of the Rate Stabilization Proceeding**



**July 9, 2002**

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<sup>1</sup> *In order to assist the California Public Utilities Commission and to facilitate the allocation of responsibility among various customer classes for the Department's costs, the Department is voluntarily submitting Prepared Testimony in this proceeding. By submitting this prepared testimony, the Department does not intend to be bound by any obligations applicable to parties in this proceeding. The Department's prepared testimony is provided as an accommodation to the Commission and does not constitute a waiver of any of its legal rights, including, but not limited to, the right to object to the use of this prepared testimony in any judicial or administrative proceeding.*

**Q. Please state your name.**

A. My name is Douglas Montague.

**Q. By whom are you employed?**

A. I am a Principal of Montague DeRose and Associates, LLC. (“MDA”). MDA serves as a consultant to the California Department of Water Resources (‘the Department’ or “DWR”) in connection with the Department’s power purchase program.

**Q. Please provide a brief description of your professional training.**

A. I have served as either an investment banker or financial advisor to municipal clients primarily in California, Utah, Nevada, Washington and Arizona since 1984. I began my municipal finance career with Lehman Brothers in its New York headquarters in 1984. Over the next nine years, I completed, as financial advisor or underwriter, more than \$22 billion of short term and long-term financings. I joined CS First Boston in 1993 to manage the firm’s Los Angeles public finance office and continued coverage of state and county level issuers. In 1995, I established Montague DeRose and Associates. I have completed a variety of different types of financings including fixed and variable rate, sales tax supported, revenue bonds secured from a variety of revenue sources, certificates of participation, lease revenue bonds, pension obligation bonds, Mello-Roos bonds, single issuer and joint powers authority structures.

I received a Bachelor of Arts degree in Business Management from the University of Utah and a Master of Business Administration degree in Finance from the Wharton School of the University of Pennsylvania.

**Q. Have you ever testified before the California Public Utilities Commission?**

A. No.

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to sponsor the attached report concerning the Department's projected bond Related Costs for 2003 and 2004.

**Q. Do you have any further testimony?**

A. Not at this time.

## **I. MONTAGUE DEROSE AND ASSOCIATES, LLC**

MDA is an independent financial advisory firm committed solely to public finance. Founded in 1995, MDA is a California Limited Liability Company. I am a principal and beneficial owner of the company. MDA is a west coast firm, with particular focus in general municipal, utility and transportation finance in the states of California and Washington. The firm has offices in Westlake Village and Walnut Creek to serve the advisory needs of its clients.

MDA was founded on the concept that public sector clients want and deserve financial advisory services that match the sophistication and level of service of Wall Street investment banks. Since its inception, MDA has provided service to dozens of nationally recognized municipal entities, including work related to the issuance of over \$16 billion in tax-exempt and taxable debt. In 2001, MDA ranked fourth in the Western States in competitive and negotiated bond sales.

Over the past several years, MDA has served, among others, the following federal, state, local and regional clients:

- County of Los Angeles
- City and County of San Francisco
- City of Long Beach
- City of Tacoma, Washington
- California State Treasurer's Office
- Washington State Treasurer's Office
- California Department of Veterans Affairs
- Washington State Dept. of Transportation
- California Department of Water Resources
- San Francisco Public Utilities Commission
- City of Tacoma Power
- City of San Diego Water
- City of San Diego Wastewater
- San Diego County Water Authority
- U.S. Department of Transportation
- Federal Highway Administration
- Port of Oakland
- San Bernardino County Trans. Authority
- Fresno County Transportation Authority

### **California Department of Water Resources**

MDA has served as financial advisor to DWR since October 1995. In this capacity, our advisors have assisted the Department with the structuring and sale of ten series of bonds totaling more than \$1.2 billion. Transactions completed for DWR since 1995 have included both fixed and variable rate issues and current, advance and forward refundings. We also assist the Department with the management of its \$100 million tax-exempt commercial paper note program.

As DWR has been required to take on additional responsibilities at the State level to manage the challenges caused by the disruptions in the California power market, MDA's professionals have been called upon to assist the Department with its new power-related activities. In January 2001, our professionals were retained to assist the Department in the securing of performance letters of credit required by power generators who would no longer sell power to the Department because of perceived credit risk. Our professionals

were given a deadline of less than 18 hours to secure the first performance letter of credit for the State. Working through the night with the headquarters of a German Bank, we were able to meet this very tight deadline and the State was able to purchase power the next day, avoiding extended rolling blackouts. Over the next several weeks, we were able to secure commitments for nearly \$1 billion in performance letters of credit to backstop the State's power purchases.

After the passage of Assembly Bill 1X ("AB1X") on February 1, 2001, Montague DeRose and Associates was retained by the Department as its financial advisor for the implementation of the State's power purchase program, including the issuance of up to \$13.4 billion in Power Supply Revenue Bonds. The firm has played an important role in the negotiation of key agreements with the Commission, the preparation of rating agency presentations, the negotiation of a \$4.3 billion bridge loan agreement, and the preparation of bond documents necessary for the sale of the long-term bonds. In addition, our professionals, along with Navigant Consulting Incorporated, have been responsible for developing a number of the models used by the Department for the forecasting of the "net short" power requirements of the state and determining the revenue requirements submitted to the Commission for purposes of rate setting.

## **II. DWR BOND CHARGES**

Beginning in early 2001, DWR, the State Treasurer's Office and their combined financing team of underwriters, financial advisors and legal advisors began the process of structuring a power supply revenue bond credit that would comply with the provisions of AB1X and also be sufficiently strong to receive investment grade ratings from the New York-based rating agencies Moody's Investors Service, Standard & Poor's and FitchRatings. While the Department has yet to receive formal ratings for its Power Supply Revenue Bond credit, it has received significant feedback from the rating agencies regarding the proposed elements of the credit. The results of this early feedback are reflected in the provisions of the Rate Agreement, with its accompanying Summary of Material Terms. We expect the Summary of Material Terms to be further amended based on refinements in DWR's modeling and final feedback received from the rating agencies. The terms agreed to in the Rate Agreement and Summary of Material Terms will be reflected in a bond indenture that serves as the principal agreement between the Department and bond holders (the "Indenture").

The Department faces significant hurdles in completing the successful sale of what will be the largest municipal bond sale in history. It must assure compliance with AB1X, satisfy the rating agencies that the bond structure warrants investment grade ratings, satisfy the requirements of bond insurance and banks that will provide credit enhancement for the bonds, and ultimately, must provide a security structure that meets the requirements of institutional and retail investors who will be purchasing the securities and be in conformity with the Department's existing contracts. In our professional judgment, the credit structure currently being evaluated by the rating agencies funds required reserves and operating accounts at levels that are consistent with industry standards for revenue bonds, also taking into account the unique characteristics of the

credit structure provided by AB1X. It is also our judgment that, given the credit provisions and constraints of AB1X, this credit structure will provide ratepayers an efficient, low cost long-term financing vehicle for power costs incurred during the 2001 energy crisis.

### **Sources of Revenues for the Balance of Calendar Year 2002**

Revenues for the remainder of calendar year 2002 from charges authorized by the February 21, 2002 Commission rate decision for the sale of electricity by DWR to customers of the investor owned utilities (“IOUs”) are projected by DWR to be sufficient to satisfy DWR’s rate covenant and to meet DWR’s Revenue Requirements for the balance of 2002, including the amounts needed to make the deposits required to the accounts held under the Indenture for debt service on the Bonds (and all other Bond Related Costs), all operating expenses and all other obligations permitted or required by AB1X and the Indenture to be paid by DWR, and to maintain required balances in the reserves and other accounts held under the Indenture. Accordingly, DWR has not requested (and does not expect to request) that the Commission calculate and impose Bond Charges for any period during 2002.

### **Accounts and Flow of Funds Under the Indenture**

The following is a description of the funds and accounts that are anticipated to be required as part of the Power Supply Revenue Bond program. The final level of funding of these funds and accounts, and the formulas used to determine their ongoing balances and the specific application of moneys within such funds and accounts are subject to final modification as required by the rating agencies, bond credit enhancers and investors in order to complete the sale of the estimated \$11.1 billion in bonds.

Revenues are held in and accounted for in the Electric Power Fund established under AB1X. The Indenture will establish two sets of accounts for Revenues within the Electric Power Fund. In the following description of accounts and the flow of funds, capitalized terms refer to terms that will be further defined in the Indenture.

One set of accounts is primarily for the deposit of Bond Charge Revenues and the payment of Bond Related Costs (collectively, the “Bond Charge Accounts”):

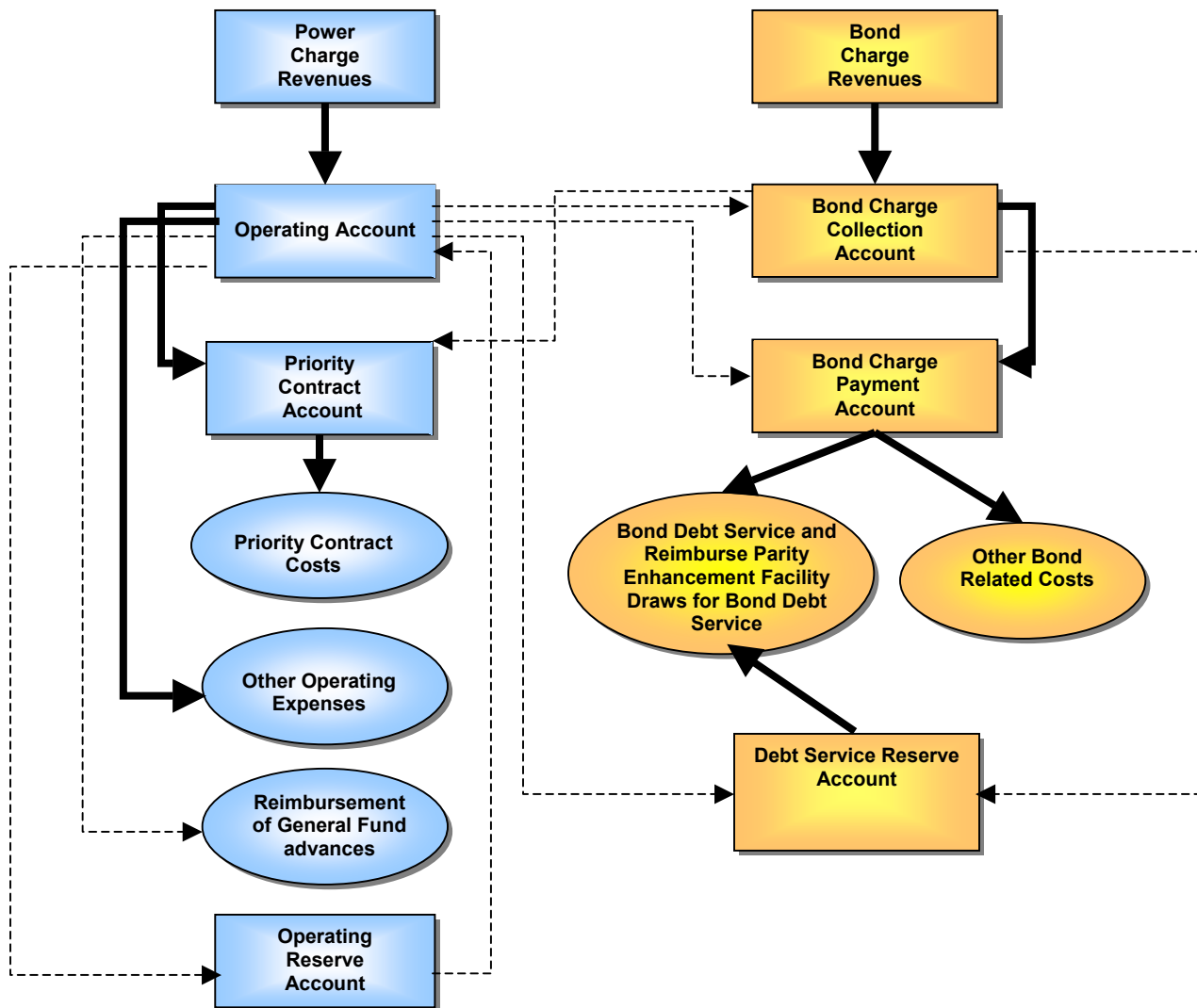
- the Bond Charge Collection Account,
- the Bond Charge Payment Account, and
- the Debt Service Reserve Account.

The other set of accounts is primarily for the deposit of Power Charge Revenues and the payment of Operating Expenses (including payments of Priority Contract Costs and other power purchase costs and other costs of the Power Supply Program) (collectively, the “Power Charge Accounts”):

- the Operating Account,
- the Priority Contract Account,
- the Operating Reserve Account, and
- the Administrative Cost Account.

The following is a simplified schematic representation of the flow of funds within the two sets of accounts:

### Flow of Revenues under the Indenture



The Indenture will require all Bond Charge Revenues to be deposited in the Bond Charge Collection Account and all Power Charge Revenues and other Revenues (other than Bond Charge Revenues) to be deposited in the Operating Account.

The Indenture will require the following transfers of Revenues to and from the Bond Charge Accounts:

- On or before the last Business Day of each month, DWR is required to transfer from the Bond Charge Collection Account to the Bond Charge Payment Account such amount as is necessary to make the amount in the Bond Charge Payment Account sufficient to pay Bond Related Costs (including debt service on the Bonds and all other Bond Related Costs) estimated to accrue or to be due and payable during the next succeeding three calendar months. Each such transfer is subject to the prior transfer of amounts in the Bond Charge Collection Account to the Priority Contract Account if and to the extent amounts in the Priority Contract Account, the Operating Account and the Operating Reserve Account are insufficient to pay Priority Contract Costs then due and owing under or pursuant to Priority Long-Term Power Contracts.
- Amounts in the Bond Charge Payment Account may be used solely to pay debt service on the Bonds and other Bond Related Costs.
- Deficiencies in the Bond Charge Payment Account are required to be made up *first*, from the Operating Account and *second* (but only for the payment of debt service on Bonds and reimbursement of draws on Enhancement Facilities that constitute Parity Obligations for such purpose), from the Debt Service Reserve Account.
- Each month after the Bond Charge Payment Account is funded as described above, Revenues are required to be transferred to the Debt Service Reserve Account and to any other reserve established for Bond Related Costs to the extent necessary to meet the respective requirements for such reserves, as follows: to the extent such transfer is required as a result of the use of Bond Charge Revenues for the payment of Priority Contract Costs, *first*, from the Operating Account and *second*, to the extent necessary, from the Bond Charge Collection Account, and (ii) to the extent such transfer is required otherwise than as described in clause (i), or in the event transfers pursuant to clause (i) are not expected by DWR to be made by the times required, from the Bond Charge Collection Account.

The Indenture will require the following transfers of Revenues to and from the Power Charge Accounts:



- On or before the fifth Business Day of each month, DWR is required to transfer from the Operating Account to the Priority Contract Account such amount as is necessary to make the amount in the Priority Contract Account sufficient to pay Priority Contract Costs estimated to be due during the balance of such month and through the first five Business Days of the next succeeding calendar month. Amounts in the Priority Contract Account may be used solely to pay Priority Contract Costs.
- Amounts in the Operating Account after the above transfer to the Priority Contract Account are to be used for the following purposes in the following order of priority:
  - (i) for transfer to the Priority Contract Account if the amount therein is insufficient to pay Priority Contract Costs then due; (that is, if the estimated amount previously transferred to that account turns out to be insufficient to pay actual Priority Contract Costs);
  - (ii) for the payment of other Operating Expenses;
  - (iii) to reimburse the Bond Charge Collection Account for amounts previously transferred from the Bond Charge Collection Account to the Priority Contract Account to pay Priority Contract Costs;
  - (iv) to pay certain Bond Related Costs (including debt service on the Bonds) if amounts in the Bond Charge Payment Account are not sufficient for those purposes;
  - (v) for transfer to the Debt Service Reserve Account to the extent provided in the Indenture;
  - (vi) to reimburse the General Fund as, and to the extent, provided by the Indenture for amounts advanced by the General Fund to the Electric Power Fund;
  - (vii) to replenish the Operating Reserve Account to its requirement;
  - (viii) to pay Subordinated Indebtedness and Subordinated Contract Obligations and certain other amounts relating thereto; and
  - (ix) for any other lawful purpose of the Power Supply Program.
- The Operating Reserve Account is being funded initially from DWR funds and is to be replenished from the Operating Account. If the amount in the Operating Account is insufficient for any of the purposes listed in clauses (i) through (v) of the preceding list, the deficiency is to be made up from the Operating Reserve Account, provided, however, that if and to the extent that

the amount in the Operating Reserve Account is or would be less than the Priority Contract Contingency Reserve Amount, amounts in the Operating Reserve Account may be used only to make up any deficiency in the Priority Contract Account.

### **Debt Service Reserve Account**

The “Debt Service Reserve Requirement” is an amount equal to maximum aggregate annual debt service on all outstanding Bonds, determined in accordance with the Indenture. The Debt Service Reserve Account is required by the Indenture to be funded in the amount of the Debt Service Reserve Requirement, initially with proceeds from the sale of the Bonds (or Alternate Debt Service Reserve Account Deposits referred to below, or a combination of both) and subsequently maintained and replenished, if necessary, from Power Charge Revenues or Bond Charge Revenues

For purposes of calculating the amount of the Debt Service Reserve Requirement from time to time, interest accruing on Variable Rate Bonds during any future period is assumed to accrue at a rate equal to the greater of (i) 130% of the daily average interest rate on such Bonds during the most recent 12 calendar months, or (ii) 4.00 percent. In addition, certain Bond principal due as a lump sum final maturity may be treated as due instead on the basis of level amortization, and other assumptions may be utilized.

Alternate Debt Service Reserve Account Deposits may be made to the Debt Service Reserve Account in lieu of cash and/or securities. Such Deposits may consist of irrevocable surety bonds, insurance policies, letters of credit or similar obligations. We are not currently assuming the use of Alternate Debt Service Reserve Account Deposits.

Whenever the amount in the Debt Service Reserve Account exceeds the Debt Service Reserve Requirement, after giving effect to any Alternate Debt Service Reserve Account Deposit, the excess may be transferred to the Bond Charge Collection Account at the direction of DWR.

Amounts in the Debt Service Reserve Account may be used solely for the payment of debt service on the Bonds and for the purpose of reimbursing an issuer or provider of an Enhancement Facility that constitutes a Parity Obligation for advances to pay such debt service, and in each case, only if amounts in the Bond Charge Payment Account and Operating Account are insufficient for that purpose.

### **Operating Reserve Account**

The “Operating Reserve Account Requirement” is an amount equal at any time to the Power Supply Program’s largest projected net operating loss during any seven calendar month period that starts during the then current revenue requirement period, based on such assumptions as the Department deems to be appropriate and taking into account a range of possible future outcomes. The Operating Reserve Account is expected initially

to be funded with a deposit of \$896 million from amounts available in the Electric Power Fund at the time of issuance of the first series of Bonds.

Amounts in the Operating Reserve Account may be used only for the purposes listed in clauses (i) through (v) of the list under “Accounts and Flow of Funds under the Indenture” above, provided, however, that if and to the extent that the amount in the Operating Reserve Account is or would be less than the Priority Contract Contingency Reserve Amount, amounts in the Operating Reserve Account may only be used to make up any deficiency in the Priority Contract Account. The “Priority Contract Contingency Reserve Amount” at any time is the maximum monthly amount of Priority Contract Costs projected by DWR to be payable under Priority Long-Term Power Contracts during the then current revenue requirement period, based on such assumptions as the Department deems to be appropriate, taking into account a range of possible future outcomes.

### **Bond Related Costs**

Bond Related Costs that are payable from Bond Charges imposed by the Commission under the Rate Agreement consist of payments or deposits or other provision to be made by DWR under the Indenture or other financing documents or the Act, for the following components of DWR’s revenue requirements under the Act:

- (i) principal of, premium, if any, and interest on Bonds and any additional amount required under the Indenture or other financing documents to be deposited into the Bond Charge Collection Account to provide debt service coverage of the Bonds;
- (ii) payments required to be made (A) under agreements with issuers of credit and liquidity facilities and their participants, including letters of credit, bond insurance, guarantees, debt service reserve fund surety bonds, lines of credit, reimbursement agreements, and standby bond purchase agreements, (B) under agreements relating to other financial instruments entered into in connection with the Bonds, including but not limited to investment agreements, hedges, interest rate swaps, caps, options and forward purchase agreements, and (C) under agreements relating to the remarketing of Bonds, including but not limited to remarketing agreements, dealer agreements and auction agent agreements (such payments may cover fees, expenses, indemnification, or other obligations due the providers of any such facilities, and such agreements may be entered into at any time after the issuance of Bonds);

- (iii) deposits to the Debt Service Reserve Account established under the Indenture to the extent necessary to provide therein an amount equal to the requirement for such account under the Indenture and other financing documents if not otherwise replenished from Power Charges;
- (iv) the costs of the Trustees and the Registrars and Paying Agents associated with the issuance and administration of the Bonds; and
- (v) when and if DWR no longer sells Power under the Act and Bonds remain outstanding, DWR's Bond Charge servicing costs, costs of preparing and providing the information and reports required under the Indenture and other financing documents, the Rate Agreement and the Act, related audit, legal and consulting costs, related administrative costs, and costs of complying with arbitrage restrictions and rebate requirements.

In connection with the planned issuance of variable interest rate Power Supply Revenue Bonds, DWR expects to enter into agreements requiring the payment of Bond Related Costs on a parity with debt service on the Bonds, such as agreements with issuers of credit and liquidity facilities and agreements with interest rate swap providers.

#### **Funding of Accounts at Bond Closing**

At the time of the closing of the last of the series of Power Supply Revenue Bonds, the bond and power-related accounts are expected to be funded at least at the levels described above. DWR's then current Electric Power Fund balance will be combined with proceeds of the bond issues to fund all accounts. The following is an indicative breakdown of account funding determined based on the assumption that the closing the sale of the last series of bonds occurs on August 15, 2002. It is important to note, however, that these projected levels of funding are still subject to final input from the rating agencies and bond insurers and could change prior to the issuance of the Power Supply Revenue Bonds.

**Sources and Uses of Funds**  
**at Assumed 8-15-02 Final Bond Closing**

**Estimated Sources of Funds**

Principal amount of Bonds	\$11,100,000,000
DWR Electric Power Fund	<u>2,183,000,000</u>
Total Sources	\$13,283,000,000

**Estimated Uses of Funds**

Repayment of Interim Loan (including accrued interest) <sup>1/</sup>	\$3,492,000,000
Repayment of State Loans (including accrued interest)	6,571,000,000
Deposit to Debt Service Reserve Account <sup>2/</sup>	929,000,000
Costs of issuance (including underwriters' discount)	111,000,000
Fees and expenses of providers of credit facilities and bond insurers	64,000,000
Deposit to Bond Charge Collection Account <sup>3/</sup>	48,000,000
Deposit to Bond Charge Payment Account <sup>4/</sup>	143,000,000
Deposit to Priority Contract Account <sup>5/</sup>	359,000,000
Deposit to Operating Account <sup>6/ 7/</sup>	670,000,000
Deposit to Operating Reserve Account <sup>8/</sup>	<u>896,000,000</u>
Total Uses	\$13,283,000,000

<sup>1/</sup> Interest on the Interim Loan through June 2002 has been paid in full and is not shown in this table.

<sup>2/</sup> Equals projected Maximum Annual Debt Service on all Bonds.

<sup>3/</sup> One month's estimated 2002 Bond Related Costs.

<sup>4/</sup> The sum of three months' estimated 2002 Bond Related Costs.

<sup>5/</sup> The maximum projected monthly amount due on Priority Long-Term Power Contracts through 2002.

<sup>6/</sup> The initial deposit is the amount required to be in the account when the last bond sale closes such that the minimum balance in the account is not projected to drop below the target balance through 2002. The target balance is based on the largest projected difference between DWR's projected operating expenses and DWR's projected revenues during any one month during 2002, taking into account a range of possible future outcomes.

<sup>7/</sup> Based upon the assumed issuance of the maximum authorized \$11.1 billion in bonds.. This amount serves as a proxy for potential additional reserve funding that may be required by the rating agencies or bond insurers. If no additional reserves are required, there will be a corresponding reduction in the amount of bonds sold.

<sup>8/</sup> The largest aggregate difference between DWR's projected operating expenses and DWR's projected revenues during any consecutive seven month period starting during the current revenue requirement period (2002), taking into account a range of possible future outcomes.

**Possible Modifications to Funding Levels Prescribed in the Rate Agreement**

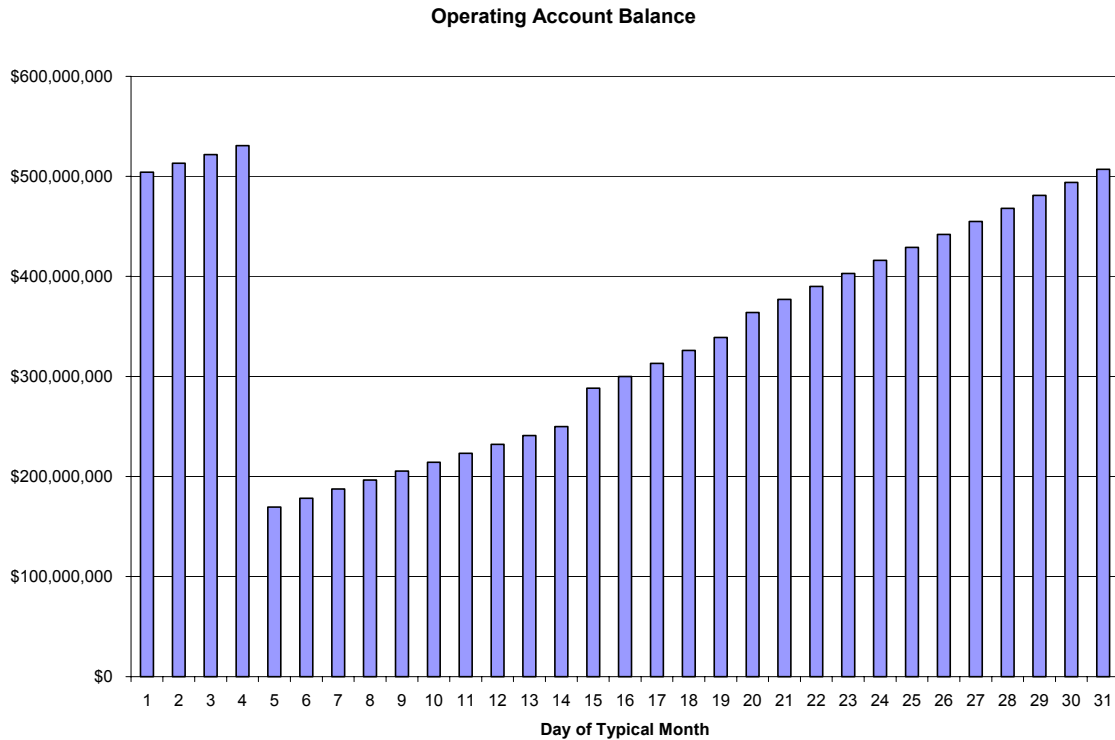
At the time of the approval of the Rate Agreement and Summary of Material Terms by DWR and the Commission, DWR's operating models were based on monthly summary modeling and data. Since that time, DWR has refined its modeling to reflect the daily behavior of the Electric Power Fund. This more granular approach to the modeling has yielded several insights into the operating characteristics of the Electric Power Fund's accounts. Among these insights is the fact that the funding level required for the

Operating Account in the Electric Power Fund varies significantly depending on which day of the month the last series of Power Supply Revenue Bonds closes.

Several dynamics have the potential for affecting the initial funding level of the Operating Account.

- **Minimum Operating Expense Available Balance** – The Summary of Material Terms prescribes the formula for computing the target minimum balance for the Operating Account as an amount equal to the to the largest projected difference between the Department’s projected operating expenses and its projected Power Charge revenues during any one month period during the then current Revenue Requirement period, taking into account a range of possible future outcomes. Based on the formula contained in the Summary of Material Terms and that the final series of bonds closes on August 15, 2002, the Minimum Operating Expense Available Balance would be the maximum monthly difference between operating expenses and Power Charge revenues during 2002 or \$113 million. The maximum 2002 volatility is observed in October 2002. In order to assure that the projected balance in the Operating Account does not fall below \$113 million in October 2002, when the account balance is projected to reach its low point, an amount in excess of the \$113 million must be initially deposited in the account.
- **Timing of Closing of Last Series of Bonds** - On or before the fifth Business Day of each month, DWR is required to transfer from the Operating Account to the Priority Contract Account such amount as is necessary to make the amount in the Priority Contract Account sufficient to pay Priority Contract Costs estimated to be due during the balance of such month and through the first five Business Days of the next succeeding calendar month. This means that from the day following the transfer to the Priority Contract Account until the fifth Business Day of the next month, revenues are accumulating in the Operating Account in preparation for the next transfer. Depending on which day of the month DWR closes its last series of bonds, it will be required to deposit a different amount of money in the Operating Account. To take the two most extreme examples, if the last series of Power Supply Revenue Bonds closes on the sixth business day of the month, very little revenue will be required as an initial deposit to the Operating Account. If, on the other hand, the last series of Power Supply Revenue Bonds closes on the fifth of the month, the initial deposit to the Operating Account must be sufficient to provide for the transfer of a full month’s priority contract costs to the Priority Contract Account. The draft Revenue Requirement filing is based on a final bond closing date of August 15, 2002. Based on that closing date, DWR will be required to deposit ten days of projected revenues, such that there will be sufficient monies in the Operating Account to make the full required September 5 transfer to the Priority Contract Account.

The following is an example of the projected daily cash behavior in the Operating Account during a typical summer month.



- Initial Bond Related Costs** - Since DWR is not projecting that it will begin receiving Bond Charge revenues until early 2003, the Indenture will permit monies held in the Operating Account to be applied to Bond Related Costs until Bond Charge revenues received by the Department are sufficient to pay all Bond Related Costs. The total Bond Related Costs to be paid from the Operating Account is estimated to be approximately \$480 million, assuming a final bond closing of August 15, 2002.

While the Summary of Material Terms provides a description of the formula for calculating the Minimum Operating Expense Available Balance, it does not make clear provisions for the additional funding of the account that will be required to assure that the projected Operating Account balance does not drop below the target minimum balance (since that projected minimum balance does not occur until several months after the closing of the final series of bonds). The Summary of Material Terms also does not make provisions for the varying levels of funding that will be required depending on different closing dates for the last series of bonds, as described above. The Department is in the process of finalizing with the Commission an addendum to the Summary of Material Terms that the Department expects will provide clarity on these points.

These suggested changes would require concurrence of the Commission before inclusion in the final 2003 Revenue Requirement filing.

## Interest Rate Assumptions

The interest rate assumptions used in modeling DWR's projected debt service on fixed and variable rate Power Supply Revenue Bonds to be issued were generated by JP Morgan, the senior managing underwriter for the bonds, based on historical averages of bond indices and the best judgment of the firm's underwriting and sales professionals. The assumptions are as follows:

**Estimated Composition of Bond Issuance**

<b>Debt Instrument</b>	<b>Amount / % of Total Debt</b>		<b>All-In Average Interest Rate</b>
Tax-Exempt Fixed Rate Bonds	\$5.0 billion	45%	5.63%
Taxable Fixed Rate Bonds	\$1.1 billion	10%	6.03%
Tax-Exempt Variable Rate Bonds	\$2.775 billion	25%	4.61%
Tax-Exempt Hedged Variable Rate Bonds	\$2.225 billion	20%	5.18%
Total Bonds / Wtd. Average Composite Rate	\$11.1 billion	100%	5.24%

As mentioned above, the taxable and tax-exempt fixed rate bond assumptions are based on the best judgment of the JP Morgan's underwriting and sales professionals. The tax-exempt variable rate bond assumptions are based on the 10-year historical averages of the Bond Market Association ("BMA") Index plus ongoing costs associated with tax-exempt variable rate bonds. These costs include bank credit and liquidity support, remarketing agent fees and issuing and paying agent fees. The use of this long-term average of the index serves as a reasonable proxy of for the long-term performance of tax-exempt variable rates. These assumptions have been reviewed by MDA and other members of the financing team. In my judgment, these interest rate assumptions accurately represent an estimate of interest rates that might be negotiated for the bonds by DWR plus a reasonable "cushion". The cushion acts as a "reserve" to protect DWR from general increases in interest rates that may occur between the time of the filing of its 2003 revenue requirement and the sale of its bonds. Given the unprecedented size of the Power Supply Revenue Bond issuance, the cushion is also required to protect the Department in the event investors demand a large interest rate premium in order to purchase the large quantity of bonds that must be sold. The projected interest rates are based on the assumption that the bonds are assigned "A" ratings from the credit rating agencies. If the bonds receive lower than "A" ratings from the rating agencies, these projected rates may not be sufficient to generate bond charges that will fully meet the debt service component of DWR's Bond Related Costs in its revenue requirement. Any projected shortfall may require the filing of a revised revenue requirement by the Department. Any surplus actually realized will be reflected in subsequent revenue requirements filed by the Department.

## Bond Maturity Schedules

The bond maturity schedules upon which the Department's 2003 revenue requirement will be based consist of a separate amortization schedule for each debt instrument that is anticipated to be sold. The Summary of Material Terms contemplates that the Power



Supply Revenue Bonds will be amortized over 20 years, with the first principal payment being made to investors in 2004 and that principal and interest payments will be structured such that the aggregate debt service on all bonds is approximately equal in each year. It is my judgment that this approach to structuring the amortization of the bonds is reasonable and consistent with industry practice.

### **Fixed and Variable Interest Rate Exposure**

The Department plans to sell a significant portion (45% percent) of its bonds as variable rate instruments, as indicated in the table above. The rating agencies, however, will place a limit on the amount of variable rate exposure that DWR should have in its debt portfolio. Early indications from the rating agencies are that this exposure should be limited to 25 percent. In order to comply with this limit, the Department expects to hedge a portion of its variable interest rate exposure by entering into floating-to-fixed payer interest rate swaps or by purchasing interest rate caps, as indicated in the table above. This hedging of variable rate risk results in what is referred to as a “synthetic” fixed rate for the Department. As is typical for interest rate swaps, the projected costs of the interest rate hedge are built in to the all-in average fixed interest rate shown in the table above. I believe that this is a reasonable approach to limiting DWR’s variable interest rate exposure while still allowing the Department to take full advantage of the depth of the tax-exempt variable rate market for this large bond issuance.

### **Costs of Issuance**

The costs of issuing the bonds that are to be paid from the proceeds of the Power Supply Revenue Bonds include fees for professional services (legal, accounting, financial advisory, energy consulting, trustee, etc.) that have been incurred in the development of the Power Supply Revenue Bond program. Given the lengthy process that has been required to complete this process, the total of these fees will be significant. In addition to the professional fees to be paid, the underwriting syndicate for the bonds, which includes more than 30 securities firms, will be paid underwriting fees for completing the sale or placement of the bonds. The estimate of \$111 million for these professional fees and expenses and underwriting fees will be refined as the schedule for the completion of the financing is finalized. A more definitive financing schedule will make it possible for the total professional fees to be more accurately estimated. It is my judgment that the totals used represent a reasonable preliminary estimate for these services.

### **Bond Insurance Costs**

Bond insurance is projected to provide economic benefit to DWR significantly in excess of its cost. Therefore, the Department is seeking to obtain as much bond insurance from “AAA” rated insurers for the Power Supply Revenue Bonds as it can secure at a reasonable cost. The amount of municipal bond insurance that will be available to DWR for the credit enhancement of the Power Supply Revenue Bonds and the premiums associated with that insurance will largely be a function of the insurers’ judgment of the strength of the credit being offered by the Department. The insurers are in the process of

completing their own independent review of the credit but will also rely heavily on the credit ratings for the bonds issued by the rating agencies. The Department's current analysis reflects the amount of insurance capacity and the cost of insurance expected if "A" ratings are secured for the bonds. If one or more rating agencies rate the bonds below the "A" level, the amount of insurance coverage offered is likely to decrease significantly and the insurance premiums will be relatively higher. It is my judgment that the bond insurance premiums estimated by the Department are reasonable, given the assumed underlying "A" ratings.

The Department's expected Bond Charge Cash Requirements through 2004 are illustrated below:

**Retail Customer Bond Charge Cash Requirement**

Period	Debt Service Payments	Other Bond Charge Account Expenses	Changes to Bond Charge Account Balances	Total Bond Charge Account Expenses	Interest Earnings on Bond Charge Account Balances	Net Transfers from Power Charge Accounts	Bond Charge Account Revenues net of Bond Charges	Retail Customer Bond Charge Revenue Requirement
2001	-	-	-	-	-	-	-	
2002	162,736,106	-	1,215,656,988	1,378,393,095	-	1,378,393,095	1,378,393,095	
2003	573,275,449	-	524,361,841	1,097,637,290	33,909,016	221,762,481	255,671,497	841,965,794
2004	920,495,476	-	101,532,980	1,022,028,457	50,771,980	-	50,771,980	971,256,477
	1,656,507,032	-	1,841,551,810	3,498,058,842	84,680,996	1,600,155,575	1,684,836,571	1,813,222,271